

CLAIMS

What is claimed is:

1. A front projection type screen comprising:
a transparent base;
a diffusion member formed on one surface of the transparent base; and
a retroreflection prism array formed on another surface of the transparent base.
2. The front projection type screen as claimed in claim 1, further comprising a reflection coating layer on a surface of the retroreflection prism array.
3. The front projection type screen as claimed in claim 1, further comprising a light absorbing member blocking light at opposite to front side of the retroreflection prism array.
4. The front projection type screen as claimed in claim 3, wherein the retroreflection prism array and the light absorbing member form an air layer therebetween.
5. The front projection type screen as claimed in claim 1, wherein the diffusion member diffuses light in vertical and horizontal directions, where the diffusion of light in the vertical direction is different from the diffusion of light in the horizontal direction.
6. The front projection type screen as claimed in claim 2, wherein the diffusion member diffuses light in vertical and horizontal directions, where the diffusion of light in the vertical direction is different from the diffusion of light in the horizontal direction.
7. The front projection type screen as claimed in claim 3, wherein the diffusion member diffuses light in vertical and horizontal directions, where the diffusion of light in the vertical direction is different from the diffusion of light in the horizontal direction.
8. The front projection type screen as claimed in claim 4, wherein the diffusion member diffuses light in vertical and horizontal directions, where the diffusion of light in the vertical direction is different from the diffusion of light in the horizontal direction.

9. The front projection type screen as claimed in claim 5, wherein the diffusion member comprises an angle of diffusion of light in a horizontal direction greater than an angle of diffusion of light in a vertical direction.

10. The front projection type screen as claimed in claim 6, wherein the diffusion member comprises an angle of diffusion of light in a horizontal direction greater than an angle of diffusion of light in a vertical direction.

11. The front projection type screen as claimed in claim 7, wherein the diffusion member comprises an angle of diffusion of light in a horizontal direction greater than an angle of diffusion of light in a vertical direction.

12. The front projection type screen as claimed in claim 8, wherein the diffusion member comprises an angle of diffusion of light in a horizontal direction greater than an angle of diffusion of light in a vertical direction.

13. The front projection type screen as claimed in claim 1, wherein the diffusion member comprises an opaque diffusion sheet formed on the one surface of the transparent base and comprising uniform diffusion factors.

14. The front projection type screen as claimed in claim 13, wherein an extension direction of the diffusion sheet is a vertical direction.

15. The front projection type screen as claimed in claim 14, wherein the diffusion member comprises an angle of diffusion of light in a horizontal direction greater than an angle of diffusion of light in the vertical direction.

16. The front projection type screen as claimed in claim 1, wherein the diffusion member comprises an opaque diffusion sheet comprising oblong shape diffusion factors.

17. A front projection type screen comprising:
a transparent base;
a diffusion member formed on one surface of the transparent base;
a retroreflection prism array formed on another surface of the transparent base; and

a reflection coating layer formed on a surface of the retroreflection prism array maximizing a quantity of light reflected by the screen and proceeding back.

18. A front projection type screen comprising:
a transparent base;
a diffusion member formed on one surface of the transparent base;
a retroreflection prism array formed on another surface of the transparent base; and
a light absorbing member positioned at a front of the retroreflection prism array to block light.

19. The front projection type screen as claimed in claim 18, wherein the retroreflection prism array comprises retroreflection prisms.

20. The front projection type screen as claimed in claim 19, wherein the retroreflection prisms comprise corner cube prisms.

21. The front projection type screen as claimed in claim 18, wherein the retroreflection prism array and the light absorbing member form an air layer therebetween allowing the light to be reflected in the retroreflection prism and proceed back.

22. A front projection type screen comprising:
a transparent base;
a diffusion member formed on one surface of the transparent base limiting diffusion of light in a vertical direction while increasing diffusion of the light in a horizontal direction;
and
a retroreflection prism array formed on another surface of the transparent base making the light, after passing the diffusion member, proceed back parallel to incident light, securing a wide angle of visibility in a horizontal direction and limiting an angle of visibility in a vertical direction.